

# Product Data Sheet



## STARBOND GP-General Purpose One Component, High Performance, Moisture-Acetic Cured, Elastomeric Silicone Sealant

### Uses:

- Sanitary Installations (Bathtubs, Washbasins, Kitchen)
- Aluminum, Window and Door Installation
- Air-Conditioning & Refrigeration
- General elastic Adhesive for various materials
- Non structural Glazing

### Product Description

**STARBOND GP** is a single component, moisture-acetic curing, high elastomeric joint sealant based on silicone. The product is used as a general purpose sealant for most construction finishes works including aluminum frames perimeter sealing, sanitary fittings sealing, non structural glazing. The product exhibits typical acetic smell and classified as a general purpose multi function sealant.

### Advantages

- Possesses permanent elasticity
- Movement accommodation factor  $\pm 12\%$  excellent adhesion.
- No shrinkage & Excellent UC resistance (No cracks or glaze)
- Resists chemical attack by chloride and sulphate ions present in the ambience
- Excellent adhesion to all common sanitary substrates.
- No sagging (Thixotropic) – No stain

### Standard Compliance

- ASTM C920 Type S, Grade NS, Class 25, use T1, NT, A, and M
- ASTM C1183

### Technical Properties

| STARBOND GP                          | Typical Values @ Laboratory Conditions |
|--------------------------------------|----------------------------------------|
| Density ( 23 °C - ISO 1183-1 A)      | 0.98 g/cm <sup>3</sup>                 |
| Extrusion rate - mass flow           | 400 - 900 g/min                        |
| Skin forming time                    | 20 min                                 |
| Hardness Shore A (ISO 868)           | 18                                     |
| Tensile strength (ISO 37)            | 1.2 N/mm <sup>2</sup>                  |
| Elongation at break (ISO 37)         | 500 %                                  |
| Modulus at 100 % Elongation (ISO 37) | 0.3 N/mm <sup>2</sup>                  |
| Movement capability ((ISO 11600)     | 12.5 %                                 |
| Tear strength (ISO 34, Method C)     | 4.0 N/mm                               |

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## Application

### Surface Preparation

The surface should be clean, dry, sound and free from oil, grease and wax contamination. Cement laitance, loose particles, mold release agent or curing membranes must be removed.

Cracks need to be chased – Concrete surface (Honeycombs) needs to be repaired with a suitable product. Fill surfaces irregularities with a suitable product. Maximum moisture content should not exceed 6%.

Before positioning a bond breaker, check the expansion joint filler to ensure it is tightly packed with no gaps or voids at the base of the sealing slot. The use of a bond breaker is not required in expansion joints prepared with cellular polyethylene joint filler, backing rod. For construction or contraction joints, use a bond breaker tape or back-up strip.

### Priming

Priming is normally not required on good quality concrete substrates.

### Application

**STARBOND GP** application should follow standard concrete joints practices; Sealants need either backing rod or joint breaker tapes to prohibit 3 point adhesion and allow movement freedom. STAR Technology refers to ACI 224.3-95 for joint design.

#### Standard Joint Design:

| Joint Distance (m) | 2  | 2 – 3.5 | 3.5 – 5 | 5 – 6.5 | 6.5 - 8 |
|--------------------|----|---------|---------|---------|---------|
| Joint Width        | 15 | 20      | 25      | 30      | 35      |
| Min Joint Width    | 10 | 15      | 20      | 25      | 30      |
| Joint Depth        | 8  | 10      | 12      | 15      | 15      |

#### Joint Size Suitability:

|               |                                                                      |
|---------------|----------------------------------------------------------------------|
| Joint Width   | 6mm to 20mm – Single Application                                     |
| Joint Depth   | Maximum 10mm on porous substrate and max 6mm on non-porous substrate |
| Width : Depth | 1 : 1                                                                |

Cut and remove the end of the “Cartridge” and place the it into the application gun.

Fit the nozzle and cut at 45 degrees to a suitable size for sealing the joint.

Eject the sealant firmly into the joint. Check within 5 minutes of application to ensure good contact between the sealant and the substrate.

### Curing and protection

**STARBOND GP** typically cures within 24 to 48 hours at room temperature and average humidity conditions. However, curing time can vary based on temperature, humidity, and the sealant's depth in the joint.

### Cleaning

Remove **STARBOND GP** from product from tools, equipment, and mixers with STAR Solvent before the initial set. Cured material can only be removed mechanically.

### Packing & Coverage

**STARBOND GP** is packed in standard cartridges.

| Joint Size in mm | Yield in m per “Cartridge” |
|------------------|----------------------------|
| 6 x 6            | 5                          |
| 9 x 6            | 4                          |
| 12 x 6           | 2                          |
| 15 x 10          | 1.5                        |
| 25 x 12          | 1                          |

Stated consumption data are for general guidance. Actual consumption depends on the nature of substrate, method of application, and wastage.

### Shelf Life & Storage

The original sealed Box of **STARBOND GP** has a shelf life of 12 months, provided it is stored clear of ground in a dry, shaded place below 35°C.

### Health & Safety

As with all chemicals, caution should always be exercised. Protective clothing such as gloves and goggles should be worn.

**STARBOND GP** is not considered hazardous – But contains Silicones.

For detailed information and advice on the safe handling, storage, and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological, and other safety-related data.

For complete Health and Safety instructions and information, please refer to STAR MSDS.

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## Additional Information:

STAR manufactures a wide range of construction chemicals and specialty products for various applications divided into the following product sections:

1. **Waterproofing Products**
2. **Sealants, Grouts, and Joint Fillers**
3. **Adhesives**
4. **HVAC – Adhesives, Coatings & Sealants**
5. **Flooring Products**
6. **Industrial Adhesives (i.e. Paper Industry)**
7. **Accessories**

STAR Technology provides various technical information such as detailed method statements, specification clauses, application manuals and technical support both in contractors and consultant's offices as well as construction sites.

For further information on these products and systems kindly visit our website or contact your local STAR representative